March 8, 2015

Dear Federal Communications Commission:

Recently, the ARRL announced to the US amateur radio community its interest in soliciting opinions about HF operations for a “band planning committee.” This comes more than 15 months after the ARRL filed RM-11708 at the Commission, with very little fanfare or public input at that time.

Since mid-March 2014, over 90% of the public comments have been against RM-11708. From the more than 800 comments filed against RM-11708, there is clear consensus that the Commission should not act on RM-11708, but instead should modify existing Part 97 amateur service rules in *at least* the following ways:

1) The FCC should be the single authority (not the ARRL or any other lobbying organization) to administer spectrum policy. Spectrum policy should not be voluntary when it comes to allowing different bandwidths to share a small slice of spectrum. The RF bandwidth of all data signals in the HF bands should be limited to less than 300 Hz below a thin slice of "automatically controlled data" segments. That is, the lower 125 Hz or so of each HF band should be a “narrowband segment” where all stations must be strictly limited in bandwidth to 300 Hz or less. Above this “narrowband” sub band segment of 125 Hz from the low band edge, there should be a small (5 or 10 kHz) “automatically controlled data” segment, and above the automatic data segment, there should be a new “wideband data” segment and the voice/image sub band. Signals of the type requested in RM-11708 should be allowed to flourish above the “narrowband segment” in the data sub band segment, including in the phone/image sub bands.

2) The FCC should specify the "automatically controlled data" HF band segments, that currently are a major source of interference due to operators not obeying today’s rules (see many comments filed in this proceeding, and see: www.savecw.com and www.savertty.com), such that they are located at 3625-3630, 7115-7120, 14130-14140, 21180-21190 and 28280-28290 Hz only - and no automatic control should be permitted on 30, 17 or 12 meter due to the limited available spectrum, and in keeping with IARU goals. Containing the automatic stations to very specific frequency bands, through FCC rules, will help avoid the many problems documented in the proceedings.

3) The FCC should require *all* automatically controlled data - including the "auto- responding stations" (97.221(c)) – to operate in the automatic control sub-bands. Commenters in this proceeding have expressly indicated the problems that exist with today’s rules.

4) The FCC should require all automatically controlled data stations to include fully functioning "channel busy" detectors that are calibrated for 125% of the bandwidth to be used, including

any "enhanced speed" modes. These stations should also be required to identify in CW at 30 words per minute once every ten minutes.

5) The FCC should require all automatically controlled data stations – including "auto-responding stations" and US licensed amateurs who operate systems off shore - to list their frequencies, operating times, and control operator telephone number and email in a publicly accessible database. These stations should also be required to identify in CW once every ten minutes. This is the only way to assure offending interferers can be identified and properly shut down if needed. Hundreds of comments in this proceeding have demonstrated problems that have arisen from these auto-responding stations, and the lack of station identification that currently persists today.

6) The FCC should require all manually controlled digital stations to include a visual means (e.g. spectrum display or "waterfall") to determine if the transmit frequency is busy before transmitting *or* include a functioning "channel busy" detector calibrated for 125% of the bandwidth to be used including any "enhanced speed" modes.

7) The FCC should expand 80 meter data/CW operations from 3500 Hz up to 3675 Hz, where the spectrum from 3625 to 3630 Hz could be used for automated stations, and the spectrum from 3630 to 3675 Hz could be used to support the types of transmissions requested in RM-11708.

These items need to be written into part 97 - by the FCC- along with a minimal bandwidth of operation (300 Hz for the lower portion of all HF CW data sub bands). Data modes such as CW, RTTY, J65, PSK31, and other data modes are enjoying great popularity, and are a key component of the global amateur radio service. Future modulations will blur the lines between data, voice, and image, and using a bandwidth regulation that protects today's narrowband operations, while permitting wide band data, is required. RM-11708 would not do that in its present form, but the above seven (7) specific suggestions would allow a regulation by bandwidth that would protect incumbent operators, ensure proper use of the amateur service, while allowing new operators of the type requested in RM-11708.

RM-11708 IGNORES CURRENT AND FUTURE INTERFERENCE ISSUES

For the record, the ARRL's *band plan* does nothing to address the problems that would be caused if RM-11708 were allowed, as the ARRL's band planning effort is strictly voluntary, and has no teeth to prevent abuse of the amateur spectrum, nor would the ARRL have any authority or ability to protect the existing narrowband amateur radio stations that currently enjoy CW, RTTY, and other narrow bandwidth digital modes.

Furthermore, the ARRL's RM-11708 petition fails to cure many *existing* problems that have been noted by hundreds of amateur radio operators who have commented in this proceeding. RM-11708 would only exacerbate abuse and create more interference than has already been documented in this proceeding. Bandwidth or baud rate limit protections for existing CW and RTTY/narrowband data operators must be maintained by the FCC, and not relegated to a voluntary organization with its own interests.

For the record, the FCC must note that in its 16 page filing of RM 11708, the ARRL never once mentioned the word 'interference', and never once inferred or implicitly acknowledged that interference could be a problem for US or global amateur narrowband operators. RM-11708 cobbled together an "apples to oranges" argument as it advocated for 2.8 kHz wide channels, based on the rarely used, low power 5 MHz SSB channels that are only used in a few countries, while completely ignoring the fact that the Commission has never allowed single sideband signals in the lower portion (data sub band) of the HF amateur bands.

Never once did the RM-11708 petition acknowledge problems that have been prevalent on the lower portion of the HF CW/data bands ever since the FCC allowed Winlink / Pactor and automated control operations with bandwidths up to 2.2 kHz in the 1990s (before the Internet became popular). The 300 baud limit currently protects narrowband amateurs, as Pactor 3 and automated stations are inefficient. However, RM-11708 *would allow data signals with bandwidths wider than SSB signals to override existing amateur throughout the entire CW/Data sub band*. The 7 rule changes listed above would ensure that present day problems are solved, while allowing new wideband data signals to flourish in frequencies 125 Hz above the HF lower band edge.

Never once did the RM 11708 petition acknowledge the desires of the IARU to prevent wideband or automated stations in the lower portions of the HF bands. These problems have been voiced by hundreds of commenters in this petition, most notably since ARRL officials visited FCC officials in March 2014 to advocate for RM-11708.

RM-11708's blatant disregard for the potential of interference for existing narrowband amateur operators, who presently enjoy FCC interference protection with an existing 300 baud limit, should be duly noted and acknowledged by the FCC. The FCC must maintain control of the regulation of the spectrum, and not allow any voluntary organization, especially one that has great self-interests, to voluntarily administer spectrum policy. The FCC must provide a bandwidth limit (300 Hz) or a baud rate limit (300 baud) for all lower HF band operations, in order to solve existing problems caused by existing automated or Winlink/Pactor 3 stations, and to prohibit future interference like the type introduced by RM-11708. Wideband data, such as requested in RM-11708, could operate in the existing phone/image bands, and in the upper end of the CW/data sub band, well above suitably protected narrowband operations.

INSIDERS PUSHED FOR EARLY PASSAGE, BUT THE GENERAL AMATEUR RADIO COMMUNITY IS DEAD AGAINST RM-11708

The ARRL and pro-RM 11708 advocates aggressively lobbied the FCC when RM-11708 was first published. This is evident by looking at the public comments filed at the RM-11708 webpage at fcc.gov, and is also seen on the ARRL website, its QST publication, and its visit to the FCC in March 2014 (see ex parte comments filed by the ARRL in April, 2014).

When the RM-11708 proposal was first filed by the ARRL in November 2013, ARRL *had not* solicited public inputs throughout the US amateur community. Over 600 "pro" RM-11708 comments were filed in the first 45 days of the proceeding, many with short notes of support. It is important for the FCC and the public to note that many of these early comments have sequential .txt numbers on the FCC web site. This appears to be "ballot stuffing" on the part of pro-RM-11708 enthusiasts, apparently with machine-generated notes of support being lobbed in to the FCC website. It is not clear if the ARRL orchestrated this "ballot stuffing," or some other organization, such as the United States Power Squadrons, which has a relationship with the ARRL to increase membership and amateur usage to recreational boaters https://www.arrl.org/files/file/Public%20Service/ARRLmouUSPS.pdf , but the evidence is clear that a well-organized "inside group" pushed to generate, perhaps by computer and perhaps with many non-amateur radio operators, comments meant to sway the FCC to pass RM 11-708.

Specifically, from 16 November 2013 through 8 July 2014, there were 1,519 public comments filed at the FCC website that related to RM-11708, filed by individuals outside the ARRL. Just seven (7) of those days produced a concentration of 835 filings, or 55 percent of ALL Comments filed up through July 8, 2014. Those 835 filings were made on 11, 12, 13, 16, 19 and 23 December 2013, as well as 23 April 2014.

Not only were these 835 filings extremely concentrated in their temporal distribution, but the comments filed on each day in December 2013 were overwhelmingly in support of RM-11708, except for the April 23, 2014 filings, where the amateur radio community had "woken up" to the ARRL's petition. For example, of the 291 Comments filed on December 11, 2013 alone (this was the largest volume single filing date), 274 public comments voiced support for RM-11708, and there were only 17 opposition comments-- a bit less than six percent.

Importantly, the "txt" numbers associated with the FCC's time stamp of public comments were found to be *sequential* over many dozens of these "pro" filings in December, suggesting that the "pro RM 11708" comments were machine generated with the specific goal of bombarding the FCC website.

Because the FCC's site does not reveal the address of each filer (a requirement for making a public filing submission), I am unable to gather a thorough compilation of which filers were

licensed radio amateurs, and which filers were not hams. It should be clear to the Commission, however, that within the first month of the publication of RM 11708, massive numbers of "pro rm-11708" comments were filed, many with the appearance of machine-generated responses aimed to flood the FCC website with reasons to push RM-11708 through, and possibly many of these comments coming from non-licensed indivdiuals. All of this activity was done *without* a good faith representation, or fair communication of the pros and cons of RM-11708, throughout the US amateur community on the part of the petitioner. The ARRL official view, as espoused by its FAQ website, and in emails with ARRL officials, was (and is) that RM-11708 was (and is) good for the hobby, and that no interference would be created if it were passed.

After the ARRL visited the FCC in March 2014, the rank and file amateur community became more aware of the dangers that RM-11708 posed to US and global narrowband operations. At the Dayton Hamvention in May 2014, one the largest gatherings of US amateur radio operators, ARRL officials had an opportunity to address and engage the amateur community about RM-11708, and had full knowledge that there was growing concerns and opposition, as evidenced by public comments filed in April and May 2014, and as evidenced by hundreds of buttons and lapel pins displaying “No RM-11708” worn by amateurs throughout the Dayton convention hall. Despite this clear concern by rank-and-file amateur opertors, ARRL officials did *not publicly engage* the amateur community regarding its position on RM-11708. Despite many public forum opportunities, the ARRL intentionally avoided the topic of RM-11708, and has *not been interested* in an earnest, technical debate about the pros and cons of RM-11708, and has not modified its filing at the FCC, despite many pleas from the amateur community.

In several discussions that I had, personally, with one of the ARRL’s more technically-inclined board of directors member during the Dayton Hamvention, the ARRL director held firm to his belief that no interference would be caused by RM-11708, and that the ARRL’s public position was fair to all amateurs, and that recreational boaters should become a part of the hobby since narrowband operations were dying and the CW/data bands are largely unused (NOTE: W4TV filed an analysis in this proceeding disproving this viewpoint, and in fact his analysis shows most amateur operations are with CW and data modes). I am personally aware of dozens of well-meaning amateur operators who tried to have discussions with ARRL leadership throughout 2014 about the perils of RM-11708, and the ARRL treated these concerns with deaf ears.

The Commission must acknowledge that if a petitioner wishes to change the existing rules, the burden of proof must be on the petitioner. Without citing or acknowledging interference, the petitioner here is obviously biased in its approach, at the great detriment to incumbent narrowband operators.

The Commission will note that once the rank and file amateur community became more aware of the perils of RM-11708 after the ARRL's visit to the FCC in March 2014, there was a groundswell of opposition, as can be seen by comments at the FCC website. The public comments filed since late March 2014 are overwhelmingly against the petition, and rather than being machine-generated, these comments are from licensed amateurs and are mostly well-thought out, often quite explicit in providing specific problems with RM-11708, and also offer solutions that could allow the types of stations desired by the petition while ensuring existing US and global narrowband operators would be protected from interference.

Spectrum policy cannot be "optional," as is requested in RM-11708. The FCC needs to keep its vital role as regulator for the amateur spectrum, to ensure that the narrowband amateur operators in the US (who make the majority of amateur contacts in the US) are not subjected to the interference provided by RM-11708 in its present form.

Thank you for the opportunity to reply to comments in this proceeding, and for consideration by the Commission.

Sincerely,

/s/

Theodore S. Rappaport

N9NB